(19) JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **07284664 A**

(43) Date of publication of application: **31.10.95**

(51) Int. Cl **B01J 23/50**
B01D 53/86
B01D 53/94
B01J 27/25

(21) Application number: **06104601**

(22) Date of filing: **20.04.94**

(71) Applicant: **RIKEN CORP**

(72) Inventor: **ABE AKIRA**
YOSHIDA KIYOHIDE

(54) WASTE GAS PURIFICATION MATERIAL AND METHOD FOR PURIFYING WASTE GAS

(57) Abstract:

PURPOSE: To efficiently remove NOx from waste combustion gas contg. excess oxygen by using a purification material obtd. by carrying silver and/or a silver compd. or a mixture of them on a porous alumina-based multiple oxide consisting of alumina and silica, titania or zirconia.

CONSTITUTION: When a waste gas purification material is made of a catalyst obtd. by carrying 0.2-15wt.% (expressed in terms of elements) silver and/or silver compd. or mixture of them on a porous inorg. oxide, a porous alumina- based multiple oxide consisting of alumina and at least one kind of oxide selected from among silica, titania and zirconia is used as the porous inorg. oxide to obtain the objective waste gas purification material for reduction and removal of NOx from waste combustion gas contg. NOx and a larger amt. of oxygen than the theoretical amt. of oxygen reacting with coexistent unburned components. This waste gas purification material is put in the middle of a waste gas duct, hydrocarbon and/or $\leq$2C oxygen-contg. org. compd. is added to waste gas at the upper stream side of the purification material and then the waste gas is brought into contact with the purification material.